

**CLIENT TERMINAL FOR DISPLAYING RANKED PROGRAM LISTINGS BASED
UPON A SELECTED RATING SOURCE**

BACKGROUND OF THE INVENTION

Field of the Invention

The present invention relates to the field of communication systems. More particularly, the present invention relates to a client terminal that provides for displaying ranked program listings in a program guide based upon a selected rating source.

Description of the Prior Art

Video program providers, such as cable and satellite networks, offer tiered levels of service to a user. These tiered levels of service include many different channels, offering a variety of television programs and movie to users. Typically, there are basic tiers, expanded basic tiers, and premium tiers. The basic tier level of service usually includes "must carry" and retransmission channels known as broadcast network channels, e.g., ABC, NBC, CBS, etc. The expanded basic tier includes the basic tier channels and an aggregation of cable or satellite channels, e.g., USA, FOX, TNT, MTV, VH1, etc. Video program providers also offer a variety of premium tiers, in addition to the basic tier or the expanded basic tier, that include "premium channels," such as HOME BOX OFFICE (HBO), SHOWTIME (SHO), CINEMAX (CMAX), STARZ, ENCORE (ENC) etc. Premium channels typically offer video programming that is not available from the basic tier channels and the expanded basic tier channels, such as newly released movies.

Typically, the channels are listed in an on-screen program guide on the user's display device (e.g. a television set). On-screen program guides usually display a listing of channels, typically in numerical order (based on the channel position and the channel call sign of the video transmission system), and the titles of the programs being broadcasted or to be broadcasted on the channels. These on-screen program guides typically show the user the list of channels and corresponding programs in a fixed grid format for an interval of time displayed in a horizontal direction across the screen. The program guide usually scrolls automatically in a vertical direction in an analog environment. In a digital environment, in which a client terminal or a set-top box is utilized, the user has the ability to provide feedback to the client terminal or set-top box to cause associated software to perform various actions in the presentation of the program

1 guide. For example, in the digital environment, the program guide can be manually scrolled
2 (vertically and horizontally) via user input. Furthermore, the viewer has the ability to alter the
3 time period or slot for which the listings are being presented and also has the ability to alter the
4 listing format such that the listings can be sorted by channel, subject, actor, and many other
5 variables.

6 Presently, many people spend time watching program content reviewers such as
7 television and movie critics (e.g. Ebert & Roeper) who rate movies and television programs.
8 Alternatively, many people read movie and television reviews in newspapers and printed
9 television guides. Oftentimes, people base what programs they view solely on the judgment of
10 one or more favorite reviewers. Thus, many people select a particular rating source upon which
11 to base their program selections. Unfortunately, presently, there is no way to integrate a
12 particular rating source, such as a critic's review of programs (e.g. television and movies), with
13 today's programming guides.

14 There is, therefore, the need to provide techniques to present programs in a program
15 guide that are ranked and ordered based upon a selected rating source, such as the
16 recommendations of a critic.

17 SUMMARY OF THE INVENTION

18 The present invention may be regarded as a client terminal connectable to a video
19 distribution system and a display device. The video distribution system provides program guide
20 information to the client terminal to create a program guide that includes program listings and
21 provides program rating data to the client terminal that is associated with rating sources.

22 The client terminal includes a video distribution system interface to receive the program
23 guide information and the program rating data, a display interface to display the program guide
24 on the display device, a user interface to receive user input, a local memory to store a ranking
25 program and a terminal controller responsive to the user interface and the ranking program. The
26 terminal controller responsive to the user interface and the ranking program allows the user to
27 select a rating source from a list of rating sources displayed on the display device, via user input.
28 Furthermore, the terminal controller responsive to the ranking program ranks the program
29 listings based upon program rating data associated with the selected rating source and displays
30 the ranked program listings in the program guide on the display device.

1 The present invention may also be regarded as a computer program embodied in a
2 computer readable storage medium for use in the client terminal. The computer program
3 comprises code segments for allowing the user to select a rating source from a list of rating
4 sources displayed on the display device, via user input. Furthermore, the computer program
5 comprises code segments for: ranking program listings based upon program rating data
6 associated with the selected rating source and displaying the ranked program listings in the
7 program guide on the display device.

8 The present invention may further be regarded as method for presenting ranked program
9 listings in a program guide based upon a selected rating source. A user is allowed to select a
10 rating source from a list of rating sources displayed on a display device via user input. The
11 program listings are ranked based upon program rating data associated with the selected rating
12 source and the ranked program listings are displayed in the program guide on the display device.

13 **BRIEF DESCRIPTION OF THE DRAWINGS**

14 FIG. 1 shows a client terminal, connected to a video distribution system and a display
15 device, that provides for displaying ranked program listings in a program guide based upon a
16 selected rating source, according to one embodiment of the present invention.

17 FIG. 2 shows an example of a list of rating sources according to one embodiment of the
18 present invention.

19 FIG. 3 shows a more specific embodiment of the video distribution system of FIG. 1
20 according to one embodiment of the present invention.

21 FIG. 4 is a flow diagram according to one embodiment of the present invention.

22 FIG. 5 is a more detailed flow diagram according to one embodiment of the present
23 invention.

24 **DESCRIPTION OF THE PREFERRED EMBODIMENTS**

25 FIG. 1 shows a client terminal 100, connected to a video distribution system 102 and a
26 display device 104, that provides for displaying ranked program listings in a program guide 106
27 based upon a selected rating source, according to one embodiment of the present invention. The
28 video distribution system 102 provides program guide information and program rating data 101
29 that is associated with rating sources 103 to the client terminal 100 through a link 105, as well as
30 video programs. The program guide information is used by the client terminal 100 to create a
31 program guide 106 that includes program listings 107. The program rating data 101 that is

1 associated with rating sources is used by the client terminal 100 to rank program listings for
2 display in the program guide 106. However, in some embodiments, the program rating data is
3 generated at the client terminal 100 for ranking program listings 107, as will be discussed.

4 The client terminal 100 includes a video distribution system interface 110 to receive the
5 program guide information and the program rating data 101, a display interface 118 to display
6 the program guide 106 on the display device 104, a user interface 112 to receive user input 114, a
7 local memory 120 to store a ranking program 116, and a terminal controller 115 responsive to
8 the user interface 112 and the ranking program 116. The terminal controller 115 responsive to
9 the user interface 112 and the ranking program 116 allows the user to select a rating source from
10 a list of rating sources 148 displayed on the display device 104, via user input 114. Furthermore,
11 the terminal controller 115 responsive to the ranking program 116 ranks the program listings 107
12 based upon program rating data associated with the selected rating source and displays the
13 ranked program listings 107 in the program guide 106 on the display device 104. Thus, program
14 listings 107 can be presented in a program guide 106 that are ranked and ordered based upon a
15 selected rating source from a list of rating sources 148.

16 The video distribution system 102 can be a cable head-end, a satellite head-end, a
17 terrestrial broadcast head-end, a multiple-service operator (MSO), a computer server head-end,
18 or any combination thereof, that is capable of broadcasting the program guide information,
19 program rating data 101, and video programs. The display device 104 is typically a television,
20 computer monitor, or any other sort of display device.

21 The program guide information and the program rating data 101 can be transmitted from
22 the video distribution system 102 to the client terminal 100 across link 105 in any type of data
23 format designed to transfer data such as concatenated data, packetized data, associated database
24 sets of attributes, etc. As shown in FIG. 1, an example of a program guide 106 is illustrated.
25 The program guide 106 created by the client terminal 100 for display on the display device 104
26 may show the user a list of channels and corresponding programs listings 107 in a fixed grid
27 format. However, it should be appreciated that a variety of different program guide formats
28 could be utilized. In one embodiment of the invention, the program guide 106 includes program
29 listings 107 for channels that appear in a ranked order based upon user selection of a rating
30 source from a list of rating sources 148. Alternatively, the program guide 106 can display a
31 listing of channels in a typical way, such as in numerical order (based on the channel position

1 and the channel call sign of the video transmission system). With the use of a client terminal
2 100, the user has the ability to provide feedback to the client terminal to cause the client terminal
3 to perform various actions in the presentation of the program guide 106. For example, the
4 program guide 106 can be manually scrolled (vertically and horizontally) via user input.
5 Furthermore, the viewer has the ability to alter the time period or slot for which the listings are
6 being presented and also has the ability to alter the listing format such that the listings can be
7 sorted by channel, subject, actor, and many other variables. Also, a video picture 111 can also be
8 shown in conjunction with the program guide 106. It should be appreciated that program guides
9 are known in the art and embodiments of the invention can be utilized with a variety of different
10 program guides.

11 The video programs can be transmitted from the video distribution system 102 to the
12 client terminal 100 across link 105 in a digital format (e.g. Moving Pictures Experts Group
13 (MPEG)-2 format, Advanced Television System Committee (ATSC) format, Digital Video
14 Broadcast (DVB) format, Open Cable Standards, etc.) or analog format (e.g. National Television
15 Standard Committee (NTSC), Phase Alternation Line (PAL), etc.) across the link 105 to the
16 client terminal 100. The video programs typically include audio and video (A/V) information
17 (e.g. a movie, television program, etc.) but can also include other types of information such as
18 data. For example, the data of a digitally broadcasted video program may include graphics,
19 video, web pages, multimedia, text, and other types of data in a variety of differing data formats
20 (e.g. Internet Protocol (IP), Advanced Television Enhancement Forum (ATVEF) content, Open
21 Cable Standards, etc.). In the digital environment, a digital channel (e.g. HBO) can include a tier
22 of channels (e.g. HBO-1, HBO-2, HBO-3). Moreover, in the digital environment, the channels
23 shown in the program guide 106 can also be computer network channels (e.g. Internet channels)
24 that upon user selection connect the client terminal to a computer network (e.g. the Internet) and
25 to the selected computer network channel. In this embodiment, the client terminal 100 having
26 the appropriate hardware (network interface cards, internal/external modems, etc.) can be
27 connected to a computer network (e.g. the Internet) with a standard telephone modem (using the
28 plain old telephone system (POTS)), a Digital Subscriber Line (DSL) modem (using a Digital
29 Subscriber Line), a cable modem (using a cable network), etc.

30 It should be appreciated that the program guide 106 can display a wide variety of types of
31 selectable channels that offer a variety of different programming and services (e.g. video

1 programming channels, premium channels, basic channels, expanded basic channels, music
2 channels, computer network channels, Internet channels, Internet access channels, other channels
3 having various services, etc.) that are aggregated from a plurality of different sources (e.g. cable
4 providers, satellite providers, terrestrial broadcast providers, multiple-service operators (MSOs),
5 computer network service providers, Internet Service Providers (ISPs), etc.) such that a user can
6 select a channel from any one of these type of providers (assuming they have the requisite
7 access rights). This also allows for partnering among these various providers, as well as,
8 increased customer satisfaction and lower customer churn (or attrition).

9 The link 105 can be broadly defined as a communication network formed by one or more
10 transport mediums. The link 105 can include a variety of communication networks such as cable
11 networks, terrestrial broadcast networks, satellite networks, computer networks (e.g. the Internet,
12 wide area networks (WANs), local area networks (LANs), wireless networks, etc.), or generally
13 any sort of public or private communications network, and combinations thereof. Examples of a
14 transport medium include, but are not restricted to electrical wire, optical fiber, cable, or wireless
15 channels using terrestrial, satellite, radio frequency, or any other wireless signaling methodology.
16 In one embodiment, the client terminal 100 is coupled to the video distribution system 102 by a
17 link that provides a persistent connection (e.g. a cable link).

18 The client terminal 100 of FIG. 1 preferably includes a video distribution system
19 interface 110, a user interface 112, a preference engine 113, a display interface 118, a local
20 memory 120, and a terminal controller 115. The video distribution system interface 110 receives
21 the program guide information, the program rating data 101, and the video programs from the
22 video distribution system 102 and transmits them to the terminal controller 115 for processing.
23 The user interface 112 is used to receive user input 114 and transmits the user input to the
24 terminal controller 115 for processing. As will be discussed in more detail later, user input 114
25 is utilized for the selection of a rating source from the list of rating sources 148. The user input
26 114 can also cause the client terminal 100 to perform other functionality associated with client
27 terminals (e.g. changing channels, digitally recording video programs, etc.).

28 The user input 114 can be from a remote control (e.g. infrared or optical), keyboard,
29 touch screen, voice activation, mouse, telephone, cellular telephone, computer (personal, laptop,
30 network, etc.) that is locally or remotely connected to the client terminal 100, a personal digital
31 assistant (PDA) that is locally or remotely connected to the client terminal 100, or basically any

1 sort of input device that is locally or remotely connected to the client terminal 100 to transmit the
2 selections of the user to the client terminal 100. The user interface 112 may include appropriate
3 hardware and associated software to receive the transmission of user input 114 from a local or
4 remote user input device. For example, the user interface 112 may include: infrared (I/R)
5 receivers, optical receivers, appropriate Input/Output (I/O) cards, network interface cards,
6 internal/external modems (standard telephone modem, Digital Subscriber Line (DSL) modem,
7 cable modem, etc.), plain old telephone system (POTS) receivers, cellular telephone receivers,
8 wireless receivers, etc.; such that the client terminal 100 can be connected locally to a user input
9 device, or, remotely to a user input device through a computer network (e.g. the Internet), the
10 POTS, a cellular network, or a wireless network, etc. It should be appreciated by those skilled in
11 the art that any sort of user input device through any type of connection and network can be used
12 to transmit the selections of the user to the client terminal 100 and the above examples are only
13 illustrative. Thus, the client terminal 100 is capable of being locally or remotely accessed to
14 cause the client terminal 100 to perform functionality associated with client terminals such as
15 scheduling video programs to be digitally recorded at a certain time, etc., as well as aspects of
16 the present invention for ranking program listings based upon a selected rating source.

17 In some embodiments, the client terminal 100 includes a preference engine 113 coupled
18 to the terminal controller 115. The preference engine 113 is configured to track user selection of
19 video program content (i.e. the channels selected and the types of content on the channels
20 selected) and to create a user profile representing the user's viewing preferences. For instance,
21 the viewing preferences, and thus the display of channels, may be categorized based on broadcast
22 content and the associated programming attributes associated with the program or series, such as
23 the genre, e.g. sports, action, comedy, drama, entertainment, news, and movies, as well as,
24 associated attributes assigned by the program guide. Additional attributes include titles of
25 programs, actors (principal and secondary), directors, writers, etc. Moreover, the viewing
26 preferences and the display of channels may be based on additional sources for viewing
27 preferences such as preferred TV channels including one or more non-subscribed channels, one
28 or more pay-per-view channels, one or more video-on-demand channels, or a combination
29 thereof. In addition, the viewing preferences may include other categories such as advertising,
30 infomercials, catalogs, Internet content, which is accessible, for example, via a modem.

1 More particularly, in one embodiment, the preference engine 113 is a software module
2 that learns a user's viewing preferences by monitoring the user's viewing patterns or by specific
3 explicit direction of the user. The preference engine 113 uses the viewing patterns of the user to
4 create a user profile 163 that may be stored in local memory 120. It is contemplated that the
5 preference engine 113 may create user profiles for more than one user and store the multiple user
6 profiles 163₁ - 163_n in local memory 120. Thus, the user-specific user profile 163 represents the
7 contents and channels the user prefers and on which day and at what time of day the user
8 watches a specific content. Additionally, the preference 113 may create an aggregated user
9 profile 164 (e.g. for a family) based upon a plurality of user profiles (e.g. for each individual
10 family member) 163₁ - 163_n, each user profile being based upon each user's viewing patterns.
11 The client terminal 100 may continually update each individual user profile 163₁ - 163_n
12 depending upon each user's actual viewing preferences and based upon other events, for
13 example, depending on whether or not it is the season for a certain sports event. The preference
14 engine 113, therefore, enables the client terminal 100 to have a "learning" capability for
15 adjusting to each user's viewing preferences.

16 As will be discussed, the preference engine creates individual user profiles 163₁ - 163_n
17 and aggregated user profiles 164, which can be selected as rating sources for ranking program
18 listings 107 in the program guide 106. Moreover, as will be discussed, the preference engine 113
19 can be used to create critic profiles and virtual critic profiles that are selectable as rating sources
20 for ranking program listings 107 in the program guide 106.

21 The display interface preferably 118 displays the program guide 106 including the
22 program listing 107, as well as, the list of rating sources 148. Also, the display interface 118
23 displays video programs transmitted from the video distribution system 102 on the display
24 device 104. The program guide 106 is suitably generated by the terminal controller 115 based
25 upon the program guide information received from the video distribution system 102 and is then
26 displayed via the display interface 118 on the display device 104. Alternatively, the video
27 distribution system 102 can generate the program guide 106 and transmit the program guide 106
28 to the client terminal 100 such that the program guide is then displayed via the display interface
29 118 on the display device 104. In one embodiment the terminal controller 115 responsive to the
30 ranking program 116 ranks the program listings 107 based upon a user selected rating source
31 selected from the list of rating sources 148 and the ranked program listings are displayed via the

1 display interface 118 on the display device 104. In another embodiment, as will be discussed,
2 the video distribution system 102 can perform the ranking of program listings 107 based upon a
3 user selected rating source from the list of rating sources 148 and transmits the program guide
4 106 with the ranked program listings 107 to the client terminal for display via the display
5 interface 118 on the display device 104.

6 The local memory 120 is coupled to the terminal controller 115. In one embodiment, the
7 local memory 120 is used to preferably store a ranking program 116, the user profiles 163₁ -
8 163_n, and the aggregated user profile 164. Alternatively, the ranking program 116, the user
9 profiles 163₁ - 163_n, and the aggregated user profile 164 can be located or co-located at the video
10 distribution system 102. Also, the local memory 120 can be used to store the program guide
11 information, the program guide, the current list of rating sources, video programs, and other
12 types of information. In one embodiment, the local memory 120 includes a rotating storage disk
13 (e.g. magnetic, optical, etc.). Alternatively, the local memory 120 can include any type of
14 semiconductor memory.

15 The terminal controller 115 is responsive to the ranking program 116 to perform many of
16 the functions of the client terminal 100, as will be discussed. As should be appreciated by those
17 skilled in the art, the terminal controller 115 preferably includes a suitable processor and
18 associated memory. Furthermore, the terminal controller 115 may include encoding and
19 decoding functionality (hardware and/or software) to encode analog signals (e.g. NTSC signals)
20 into digital signals (e.g. MPEG-2) and to decode digital signals (e.g. MPEG-2) into analog
21 signals (e.g. NTSC signals). This allows digital signals to be decoded for display on an analog
22 display device and allows analog signals to be encoded into digital signals for recording in local
23 memory along with other functionality associated with client terminals/set-top boxes. Moreover,
24 it should be appreciated that client terminals with recording capabilities and other types of set-top
25 boxes are well known in the art.

26 In one embodiment, the ranking program 116 is suitably implemented by the terminal
27 controller 115 of the client terminal 100 as one or more instructions or code segments. The
28 instructions/code segments when read and executed by the terminal controller 115 cause the
29 terminal controller 115 to perform the operations necessary to implement the various functions
30 according to embodiments of the invention. Generally, the instructions/code segments are
31 tangibly embodied in and/or readable from a machine-readable medium, device, or carrier, such

1 as memory, data storage devices, and/or a remote device contained within or coupled to the
2 client terminal 100. The instructions/code segments may be loaded from memory (e.g. local
3 memory 120), data storage devices, and/or remote devices into the terminal controller 115 for
4 use during operations.

5 A user, via user input 114, can select a rating source from a list of rating sources 148
6 displayed on the display device 104. The terminal controller 115 responsive to the user input
7 114 and the ranking program 116 selects the desired rating source from the list of rating sources
8 148. The terminal controller 115 responsive to the ranking program 116 ranks the program
9 listings 107 based upon program rating data associated with the selected rating source and
10 displays the ranked program listings 107 in the program guide 106 on the display device 104.
11 The program rating data is typically data that includes a rating for each of a plurality of programs
12 (e.g. television programs, movies, data channels, Internet channels, etc.). A variety of rating
13 schemes can be used. For example, numerical rating schemes can be used, e.g., a numerical
14 rating between 1-10, 1-100, 4 stars, 5 stars, binary-1 "approved" (e.g. thumbs up), binary-0
15 "disapproved" (e.g. thumbs down), etc. In one embodiment, this program rating data 101 can be
16 associated with a content rating source 103 located at a video distribution system 102. However,
17 in some embodiments, the program rating data is generated at the client terminal 100 for ranking
18 program listings 107, as will be discussed.

19 The terminal controller 115 responsive to the ranking program 116 ranks the program
20 listings 107 by comparing the program rating data associated with the selected rating source to
21 the currently available program listings 107 of the program guide 106 and then orders the
22 program listings 107 based upon the rating of each program. Thus, program listings 107 can be
23 displayed in a program guide 106 that are ranked and ordered based upon a selected rating source
24 from a list of rating sources 148. For example, the program listings may be ordered with the
25 highest or lowest rated program listings at the top or bottom of the ordered program guide 106,
26 respectively.

27 As shown in the exemplary program guide 106, the following channels are shown:
28 channel 52-HBO, channel 50-VH1, channel 4-NBC, channel 7-ABC, channel 53-SHO, etc. The
29 corresponding titles of the video programs and the times are also shown. It should be
30 appreciated that any type of program guide format can be utilized with embodiments of the
31 invention. In this example, the channels are ranked based upon a user selecting a rating source

1 from the list of rating sources 148. For example, a selected rating source can be a critic rating
2 source such as movie critics (e.g. Ebert and Roeper, Leonard Maltin (Entertainment Tonight),
3 Gene Shallit (NBC's Today Show), etc.), a printed/electronic publication (e.g. TV GUIDE), a
4 service provider review (e.g. Cable and Satellite Network reviews of programs), Newspaper
5 reviews, etc. Therefore, if a user selects a rating source (e.g. a critic rating source such as TV
6 GUIDE) that includes associated program rating data that rates the following programs very
7 highly (and in the following order): The Soprano's (e.g. rating 10), The History of Rock 'n' Roll
8 (e.g. rating 9.5), The West Wing (e.g. rating 9.3), Who Wants to be a Millionaire (e.g. rating
9 9.0), and American Beauty (e.g. rating 8.5); and these programs are currently being shown, these
10 program listings 107 will be ranked and shown in this ranked order in the program guide 106.

11 It should be appreciated, in a digital environment, other digital channels could be shown
12 such as HBO-2, HBO-3, SHO-2, SHO-3, etc. Additionally, the channels shown can also be
13 computer network channels (e.g. Internet channels) that may be rated by a rating source. For
14 example, TV GUIDE may rate Martha Stewart's programs very highly, and a program listing
15 107 may be shown for one of Martha Stewart's television programs, and a program listing 107
16 may be shown for a web-site associated with Martha Stewart.

17 Embodiments of the present invention can be used with a wide variety of different rating
18 sources. FIG. 2 shows an example of a list of rating sources 148 according to one embodiment
19 of the present invention. As shown in FIG. 2, the list of rating sources 148 includes a number of
20 different rating sources that are selectable by the user. For example, the list of rating sources 148
21 can include a plurality of critic rating sources 1-N 160_{1-N}, an aggregated subscriber rating source
22 162, a user profile rating source 163, an aggregated user profile rating source 164, and critic
23 profile rating sources 1-N 166_{1-N}. It should be appreciated that a variety of other rating sources
24 can also be utilized and offered for selection.

25 As previously discussed, a selectable rating source can be a critic rating source 160_{1-N}
26 such as movie critics (e.g. Ebert and Roeper, Leonard Maltin (Entertainment Tonight), Gene
27 Shallit (NBC's Today Show), etc.), a printed/electronic publication (e.g. TV GUIDE), a service
28 provider review (e.g. Cable and Satellite Network reviews of programs), Newspaper reviews,
29 etc. If the rating source selected from the list of rating sources 148 is a critic rating source 160_{1-N}
30 that includes program rating data associated with a critic, the program listings 107 are ranked by
31 the selected critic rating source and displayed in the program guide 106, as previously described.

1 Particularly, the terminal controller 115 responsive to the ranking program 116 ranks the
2 program listings 107 by comparing the program rating data associated with the selected critic
3 rating source 160_{1-N} to the currently available program listings 107 of the program guide 106 to
4 order the program listings 107 based upon the rating of each program. The program listings 107
5 can then be displayed in the program guide 106 in ranked order.

6 The critic rating source 160_{1-N} is typically stored at the video distribution system 102 as
7 one of the rating sources 103. In this embodiment, with brief reference also to FIG. 3, the critic
8 rating source 160_{1-N} is stored within memory 153 of the video distribution system 102 as part of
9 the stored rating sources 103 and the program rating data 101 associated with the critic rating
10 source 160_{1-N} is transmitted via link 105 to the client terminal 100 for use by the terminal
11 controller 115 in ranking and displaying the program listings.

12 Thus, as an example, with reference to FIG. 1, if a user selects a critic rating source 160_{1-N}.
13 N (e.g. TV GUIDE) that includes associated program rating data 101 that rates the following
14 programs very highly (and in the following order): The Soprano's (e.g. rating 10), The History of
15 Rock 'n' Roll (rating 9.5), The West Wing (rating 9.3), Who Wants to be a Millionaire (rating
16 9.0), and American Beauty (rating 8.5); and these programs are currently being shown, these
17 program listings 107 will be ranked and shown in this ranked order in the program guide 106.

18 Another type of selectable critic rating source 160_{1-N} is a virtual critic rating source that
19 includes program rating data associated with a plurality of critics (e.g. critic rating sources). The
20 virtual critic rating source combines the program rating data associated with a variety of different
21 critic sources to create a virtual or combined critic. For example, the program rating data
22 associated with the variety of different critic sources to create the virtual or combined critic,
23 could be combined by averaging. In one embodiment, the user can pick the critics they want to
24 combine together to form their virtual critic. Alternatively, a plurality of virtual critics can be
25 presented for selection by the user. It should be appreciated that a wide variety of virtual critics
26 can be created. For example, a combination of two or more of the following critic rating sources
27 could be used: movie critics (e.g. Ebert and Roeper, Leonard Maltin (Entertainment Tonight),
28 Gene Shallit (NBC's Today Show), etc.), a printed/electronic publication (e.g. TV GUIDE), a
29 service provider review (e.g. Cable and Satellite Network reviews of programs), Newspaper
30 reviews, etc. If the rating source selected from the list of rating sources 148 is a virtual critic
31 rating source 160_{1-N} that includes program rating data associated with a plurality of critics, the

1 program listings 107 are ranked by the selected virtual critic rating source and displayed in the
2 program guide 106, as previously described. Particularly, the terminal controller 115 responsive
3 to the ranking program 116 ranks the program listings 107 by comparing the program rating data
4 associated with the selected virtual critic rating source 160_{1-N} to the currently available program
5 listings 107 of the program guide 106 to order the program listings 107 based upon the rating of
6 each program. The program listings 107 can then be displayed in the program guide 106 in
7 ranked order.

8 The virtual critic rating source 160_{1-N} is typically stored at the video distribution system
9 102 as one of the rating sources 103. In this embodiment, with brief reference also to FIG. 3, the
10 virtual critic rating source 160_{1-N} is stored within memory 153 of the video distribution system
11 102 as part of the stored rating sources 103 and the program rating data 101 associated with the
12 virtual critic rating source 160_{1-N} is transmitted via link 105 to the client terminal 100 for use by
13 the terminal controller 115 in ranking and displaying the program listings.

14 Thus, as an example, with reference to FIG. 1, if a user selects a virtual critic rating
15 source 160_{1-N} (e.g. a combination of Ebert and Roeper and TV GUIDE) that includes associated
16 program rating data 101 that rates the following programs very highly (and in the following
17 order): The Soprano's (e.g. rating 10), The History of Rock 'n' Roll (rating 9.5), The West Wing
18 (rating 9.3), Who Wants to be a Millionaire (rating 9.0), and American Beauty (rating 8.5); and
19 these programs are currently being shown, these program listings 107 will be ranked and shown
20 in this ranked order in the program guide 106.

21 Another selectable rating source from the list of rating sources 148 is the aggregated
22 subscriber rating source 162. If the rating source selected is the aggregated subscriber rating
23 source 162, which includes program rating data based upon the aggregated usage characteristics
24 of other subscribers to the video distribution system 102, the program listings 107 are ranked by
25 the selected aggregated subscriber rating source and displayed in the program guide 106.
26 Particularly, the terminal controller 115 responsive to the ranking program 116 ranks the
27 program listings 107 by comparing the program rating data associated with the selected
28 aggregated subscriber rating source 162 to the currently available program listings 107 of the
29 program guide 106 to order the program listings 107 based upon the rating of each program. The
30 program listings 107 can then be displayed in the program guide 106 in ranked order.

1 The aggregated subscriber rating source 162 is typically stored at the video distribution
2 system 102 as one of the rating sources 103. In this embodiment, with brief reference also to
3 FIG. 3, the aggregated subscriber rating source 162 is stored within memory 153 of the video
4 distribution system 102 as part of the stored rating sources 103 and the program rating data 101
5 associated with the aggregated subscriber rating source 162 is transmitted via link 105 to the
6 client terminal 100 for use by the terminal controller 115 in ranking and displaying the program
7 listings.

8 Thus, as an example, with reference to FIG. 1, if a user selects the aggregated subscriber
9 rating source 162 that includes associated program rating data 101 aggregated from a set of
10 subscribers to the video distribution system 102 and they rate the following programs very highly
11 (and in the following order): The Soprano's (e.g. rating 10), The History of Rock 'n' Roll (e.g.
12 rating 9.5), The West Wing (e.g. rating 9.3), Who Wants to be a Millionaire (e.g. rating 9.0), and
13 American Beauty (e.g. rating 8.5); and these programs are currently being shown, these program
14 listings 107 will be ranked and shown in this ranked order in the program guide 106.

15 Another selectable rating source from the list of rating sources 148 is a user profile rating
16 source 163. Multiple user profile rating sources 163_{1-N} may be shown in the list of rating sources
17 148. As previously discussed, local memory 120 of the client terminal can store multiple user
18 profiles 163_{1-N}, thus a user (e.g. a member of family) can select a user profile 163 for himself or
19 herself, or another user profile 163 (e.g. another member of the family). As previously described,
20 the user profile 163 includes the preferences of the user. Unlike a selectable critic rating source
21 160, which includes specific program rating data for specific programs, the user profile 163 is an
22 actual profile, that is generated by the preference engine 113 based upon the user's past viewing
23 history, as previously discussed. Thus, the user profile 163 rank programs, based on the
24 preferences of the user, without necessarily having actual specific program rating data for the
25 particular programs. If the rating source selected is a user profile 163, the terminal controller
26 115 responsive to the ranking program 116 applies the selected user profile to the program guide
27 information to create program rating data associated with the user profile. Next, the terminal
28 controller 115 responsive to the ranking program 116 ranks the program listings 107 by
29 comparing the program rating data associated with the selected user profile 163 to the currently
30 available program listings 107 to order the program listings 107 based upon the rating of each
31 program and displays the program listings 107 in ranked order in the program guide 106.

1 The user profiles 163_{1-N} can also be located or co-located at the video distribution system
2 102 as one of the rating sources 103. In this embodiment, with brief reference also to FIG. 3, the
3 user profiles 163_{1-N} are stored within memory 153 of the video distribution system 102 as part of
4 the stored rating sources 103 and the program rating data 101 associated with the selected user
5 profile 163_{1-N} is transmitted via link 105 to the client terminal 100 for use by the terminal
6 controller 115 in ranking and displaying the program listings. In this embodiment, the video
7 distribution system 102 applies the selected user profile to the program guide information to
8 create program rating data associated with the user profile. Alternatively, just the selected user
9 profile 163 is transmitted via link 105 to the client terminal 100 and the client terminal does the
10 subsequent processing, as previously discussed.

11 Thus, as an example, with reference to FIG. 1, if a user selects a user profile 163, the
12 terminal controller 115 responsive to the ranking program applies the selected user profile 163 to
13 the program guide information to create program rating data that rates the following programs
14 very highly (and in the following order): The Soprano's (e.g. rating 10), The History of Rock 'n'
15 Roll (e.g. rating 9.5), The West Wing (e.g. rating 9.3), Who Wants to be a Millionaire (e.g. rating
16 9.0), and American Beauty (e.g. rating 8.5); and these programs are currently being shown, these
17 program listings 107 will be ranked and shown in this ranked order in the program guide 106.

18 An additional selectable rating source from the list of rating sources 148 is an aggregated
19 user profile rating source 164. As previously discussed, local memory 120 of the client terminal
20 can store multiple user profiles 163_{1-N}, thus a user (e.g. a member of family) can select an
21 aggregated user profile that is a combination of all the user profiles 163_{1-N} (e.g. all the members
22 of the family). As previously described, the aggregated user profile 164 includes the aggregated
23 preferences of multiple users. Unlike a selectable critic rating source 160, which includes
24 specific program rating data for specific programs, the aggregated user profile 164 is an actual
25 profile, that is generated by the preference engine 113 based upon the past viewing history of the
26 aggregated users, as previously discussed. Thus, the aggregated user profile 164 ranks programs,
27 based on the preferences of the aggregated users, without necessarily having actual specific
28 program rating data for the particular programs. If the rating source selected is the aggregated
29 user profile 164, the terminal controller 115 responsive to the ranking program 116 applies the
30 selected aggregated user profile 164 to the program guide information to create program rating
31 data associated with the aggregated user profile 164. Next, the terminal controller 115

1 responsive to the ranking program 116 ranks the program listings 107 by comparing the program
2 rating data associated with the selected aggregated user profile 164 to the currently available
3 program listings 107 to order the program listings 107 based upon the rating of each program and
4 displays the program listings in ranked order in the program guide 106.

5 The aggregated user profile 164 can also be located or co-located at the video distribution
6 system 102 as one of the rating sources 103. In this embodiment, with brief reference also to
7 FIG. 3, the aggregated user profile 164 (which is one of a plurality of aggregated user profiles
8 164_{1-N}) is stored within memory 153 of the video distribution system 102 as part of the stored
9 rating sources 103 and the program rating data 101 associated with the selected aggregated user
10 profile 164 is transmitted via link 105 to the client terminal 100 for use by the terminal controller
11 115 in ranking and displaying the program listings. In this embodiment, the video distribution
12 system 102 applies the selected aggregated user profile 164 to the program guide information to
13 create program rating data associated with the aggregated user profile 164. Alternatively, just
14 the aggregated user profile 164 is transmitted via link 105 to the client terminal 100 and the
15 client terminal does the subsequent processing, as previously discussed.

16 Thus, as an example, with reference to FIG. 1, if a user selects an aggregated user profile
17 164, the terminal controller 115 responsive to the ranking program applies the selected
18 aggregated user profile 164 to the program guide information to create program rating data that
19 rates the following programs very highly (and in the following order): The Soprano's (e.g. rating
20 10), The History of Rock 'n' Roll (e.g. rating 9.5), The West Wing (e.g. rating 9.3), Who Wants
21 to be a Millionaire (e.g. rating 9.0), and American Beauty (e.g. rating 8.5); and these programs
22 are currently being shown, these program listings 107 will be ranked and shown in this ranked
23 order in the program guide 106.

24 Yet another selectable rating source from the list of program rating sources 148 is a critic
25 profile 166. For example, the list of rating sources 148 can include a plurality of critic profile
26 rating sources 1-N 166_{1-N}. Unlike a selectable critic rating source 160, which includes specific
27 program rating data for specific programs, the critic profile rating sources are actual profiles
28 (similar to the user profile 163), that are generated by a preference engine based upon a past
29 history of ratings by the critic rating source, such as past program rating data associated with the
30 critic. Thus, the critic profile 166 ranks programs, based on the preferences of the critic rating
31 source, without necessarily having actual specific program rating data for the particular

1 programs. Examples of critic profiles 166_{1-N} can be the same as the critic rating sources 160_{1-N},
2 but can also include other critic profiles. Accordingly, similar to the critic rating source, critic
3 profiles can include such content review sources such as movie critics (e.g. Ebert and Roeper,
4 Leonard Maltin (Entertainment Tonight), Gene Shallit (NBC's Today Show), etc.), a
5 printed/electronic publication (e.g. TV GUIDE), a service provider review (e.g. Cable and
6 Satellite Network reviews of programs), Newspaper reviews, etc.

7 Moreover, the list of rating sources 148 can include a plurality of virtual critic profile
8 rating sources 1-N 166_{1-N}. Unlike a selectable critic rating source 160, which includes specific
9 program rating data for specific programs, the virtual critic profile rating sources are actual
10 profiles (similar to the user profile 163), that are generated by the preference engine based upon
11 a past history of ratings by a plurality of critic rating sources, such as past program rating data
12 associated with the plurality of critics. Particularly, the preference engine creates a virtual critic
13 profile based upon program rating data associated with a plurality of critic rating sources (e.g.
14 critics associated with critic rating sources). Thus, the virtual critic profile 166 ranks programs,
15 based on the preferences of the plurality of critic rating sources, without necessarily having
16 actual specific program rating data for the particular programs. In one embodiment, the user can
17 pick the critics they want to combine together to form their own virtual critic profile.

18 Alternatively, a plurality of virtual critic profiles can be presented for selection by the user.
19 Examples of virtual critic profiles 166_{1-N} can be combinations of two or more of the critic rating
20 sources 160_{1-N}, but can also include other critic profiles. It should be appreciated that a wide
21 variety of virtual critic profiles can be created. For example, a combination of two or more of
22 the following critic rating sources could be used to create a virtual critic profile: movie critics
23 (e.g. Ebert and Roeper, Leonard Maltin (Entertainment Tonight), Gene Shallit (NBC's Today
24 Show), etc.), a printed/electronic publication (e.g. TV GUIDE), a service provider review (e.g.
25 Cable and Satellite Network reviews of programs), Newspaper reviews, etc.

26 Accordingly, similar to the critic rating source, critic profiles and virtual critic profiles
27 can include such content review sources such as: movie critics (e.g. Ebert and Roeper, Leonard
28 Maltin (Entertainment Tonight), Gene Shallit (NBC's Today Show), etc.), a printed/electronic
29 publication (e.g. TV GUIDE), a service provider review (e.g. Cable and Satellite Network
30 reviews of programs), Newspaper reviews, etc.

1 The critic rating profiles and virtual critic rating profiles 166_{1-N} can be generated locally
2 at the client terminal 100 by the preference engine 113 based on critic rating source data received
3 from the video distribution system 102 and stored in local memory 120. Alternatively, with brief
4 reference to FIG. 3, critic rating profiles and virtual critic rating profiles 166_{1-N} can be generated
5 remotely at the video distribution system 102 by the preference engine 158 based on critic rating
6 source data stored at the video distribution system 102. Further, the critic rating profiles and
7 virtual critic rating profiles 166_{1-N} can be stored in memory 153 at the video distribution system
8 102. The use of preference engines to create profiles has been previously discussed.

9 In one embodiment, where the client terminal 100 generates the critic profile or virtual
10 critic profile 166_{1-N} using the preference engine 113, if the rating source selected is a critic
11 profile or virtual critic profile 166_{1-N}, the terminal controller 115 responsive to the ranking
12 program 116 applies the selected critic profile or virtual critic profile 166 to the program guide
13 information to create program rating data associated with the selected critic or virtual critic
14 profile 166. Next, the terminal controller 115 responsive to the ranking program 116 ranks the
15 program listings 107 by comparing the program rating data associated with the selected critic or
16 virtual critic profile 166 to the currently available program listings 107 to order the program
17 listings 107 based upon the rating of each program and displays the program listings in ranked
18 order in the program guide 106.

19 In the embodiment where the selected critic or virtual critic profile 166 is located at the
20 video distribution system 102, the program rating data 101 associated with the selected critic or
21 virtual critic profile 166 is transmitted via link 105 to the client terminal 100 for use by the
22 terminal controller 115 in ranking and displaying the program listings. In this embodiment, the
23 video distribution system 102 applies the selected critic or virtual critic profile 166 to the
24 program guide information to create the program rating data associated with the selected critic or
25 virtual critic profile 166. Alternatively, just the selected critic or virtual critic profile 166 is
26 transmitted via link 105 to the client terminal 100 and the client terminal does the subsequent
27 processing, as previously discussed.

28 Thus, as an example, with reference to FIG. 1, if a user selects a critic or virtual critic
29 profile 166, the terminal controller 115 responsive to the ranking program applies the selected
30 critic or virtual critic profile to the program guide information to create program rating data that
31 rates the following programs very highly (and in the following order): The Soprano's (e.g. rating

1 10), The History of Rock 'n' Roll (e.g. rating 9.5), The West Wing (e.g. rating 9.3), Who Wants
2 to be a Millionaire (e.g. rating 9.0), and American Beauty (e.g. rating 8.5); and these programs
3 are currently being shown, these program listings 107 will be ranked and shown in this ranked
4 order in the program guide 106.

5 Thus, embodiments of the invention, allow for program listings to be automatically
6 ranked and ordered in a program guide based upon a user selecting a rating source from a list of
7 rating sources displayed on their display device.

8 As discussed previously, the video distribution system 102 performs some functions in
9 conjunction with the client terminal 100. Moreover, in some embodiments of the invention, the
10 video distribution system 102 can perform many functions in place of the client terminal 100.

11 Referring also to FIG. 3, FIG. 3 shows a more specific embodiment of the video
12 distribution system 102 of FIG 1. The video distribution system 102 includes a video program
13 transmitter 150, a video distribution system controller 152, a memory 153, a client terminal
14 interface 156, a preference engine 158, and a network interface 159. Under the control of the
15 video distribution system controller 152, the video program transmitter 150 transmits video
16 programs, program guide information, and program rating data 110 on channels_{1-N} via link 105
17 to client terminals.

18 The memory 153 stores a ranking program 116. The ranking program 116 can be another
19 instance of the ranking program 116, as previously discussed with reference to the client terminal
20 100. The memory 153 also stores the rating sources 103 which include a plurality of critic rating
21 sources 1-N 160_{1-N} (including virtual critic rating sources), aggregated subscriber rating source
22 162, a plurality of user profile rating sources 1-N 163_{1-N}, a plurality of aggregate user profile
23 rating source 1-N 164_{1-N}, and a plurality of critic profile rating sources 1-N 166_{1-N} (including
24 virtual critic profile rating sources). It should be appreciated that a variety of other rating
25 sources can also be stored at the video distribution system 102. The memory 153 can include
26 rotating storage disk type memory (e.g. magnetic, optical, etc.), data storage devices, any type of
27 semiconductor memory (RAM, ROM, etc), or any type of suitable memory for storing this type
28 of data.

29 The client terminal interface 156 is a suitable interface for communication with client
30 terminals via link 105. The preference engine 158 can be a preference engine similar to the
31 preference engine 113, previously described. The network interface 159 couples the video

1 distribution system 102 to other computer networks 170 (e.g. WANs, LANs, the Internet, etc.).
2 In one particular embodiment, the video distribution system 102 can receive data for the rating
3 sources 103 (e.g. critic rating sources 1-N 160_{1-N}, the aggregated subscriber rating source 162,
4 user profile rating sources 1-N 163_{1-N}, aggregated user profile rating source 1-N 164_{1-N}, and
5 critic profile rating sources 1-N 166_{1-N}) from other computer networks 170 via the network
6 interface 170. For example, the video distribution system 102 could receive data for the critic
7 rating source 160, e.g. TV GUIDE, from a web-site for TV GUIDE over the Internet.

8 Using embodiments of the invention related to the video distribution system 102, a user,
9 via user input 114, can select a rating source from the list of rating sources 148 displayed on the
10 display device 104. The video distribution system controller 152 responsive to the user input
11 114 received over link 105 from the client terminal 100 and the ranking program 116, selects the
12 desired rating source from the rating sources 103 stored in memory 153 to correspond with the
13 rating source selected from the list of rating sources 148 by the user. The video distribution
14 system controller 152 responsive to the ranking program 116 ranks the program listings 107
15 based upon program rating data associated with the selected rating source. The video
16 distribution system controller 152 then commands the client terminal 100 to display the ranked
17 program listings 107 in the program guide 106 on the display device 104. The program rating
18 data is typically data that includes a rating for each of a plurality of programs (e.g. television
19 programs, movies, data channels, Internet channels, etc.). A variety of rating schemes can be
20 used. For example, numerical rating schemes can be used, e.g., a numerical rating between 1-10,
21 1-100, 4 stars, 5 stars, binary-1 "approved" (e.g. thumbs up), binary-0 "disapproved" (e.g.
22 thumbs down), etc.

23 The video distribution system controller 152 responsive to the ranking program 116 ranks
24 the program listings 107 by comparing the program rating data associated with the selected
25 rating source to the currently available program listings 107 of the program guide 106 and then
26 orders the program listings 107 based upon the rating of each program for display. Thus,
27 program listings 107 can be displayed in a program guide 106 that are ranked and ordered based
28 upon a selected rating source from a list of rating sources 148. For example, the program listings
29 may be ordered with the highest or lowest rated program listings at the top or bottom of the
30 ordered program guide 106, respectively. Thus, in this embodiment, the video distribution

1 system 102 performs many of the functions previously described as being performed by the
2 client terminal 100.

3 For example, if a critic rating source or a virtual critic rating source 160_{1-N}, such as movie
4 critics (e.g. Ebert and Roeper, Leonard Maltin (Entertainment Tonight), Gene Shallit (NBC's
5 Today Show), etc.), a printed/electronic publication (e.g. TV GUIDE), a service provider review
6 (e.g. Cable and Satellite Network reviews of programs), Newspaper reviews, (or a combination
7 thereof in case of the virtual critic rating source), etc., is selected from the list of rating sources
8 148, the program rating data associated with selected critic or virtual critic rating source is used
9 to rank the program listings 107, as previously described. Particularly, the video distribution
10 system controller 152 responsive to the ranking program 116 ranks the program listings 107 by
11 comparing the program rating data associated with the selected critic or virtual critic rating
12 source 160_{1-N} to the currently available program listings 107 of the program guide 106 to order
13 the program listings 107 based upon the rating of each program. The video distribution system
14 controller 152 then commands the client terminal 100 to display the ranked program listings 107
15 in the program guide 106 on the display device 104. Alternatively, the video distribution system
16 controller 152 can send a program guide 106 that is ranked to the client terminal 100.

17 As another example, if the aggregated subscriber rating source 162 is selected from the
18 list of rating sources 148 the program rating data associated with selected critic rating source is
19 used to rank the program listings 107, as previously described. The aggregated subscriber rating
20 source 162 includes program rating data based upon the aggregated usage characteristics of other
21 subscribers to the video distribution system 102. Particularly, the video distribution system
22 controller 152 responsive to the ranking program 116 ranks the program listings 107 by
23 comparing the program rating data associated with the selected the aggregated subscriber rating
24 source 162 to the currently available program listings 107 of the program guide 106 to order the
25 program listings 107 based upon the rating of each program. The video distribution system
26 controller 152 then commands the client terminal 100 to display the ranked program listings 107
27 in the program guide 106 on the display device 104. Alternatively, the video distribution system
28 controller 152 can send a program guide 106 that is ranked to the client terminal 100.

29 In some embodiments, the video distribution system 102 stores user profiles 163_{1-N} for
30 the users of the client terminals. The user profiles 163_{1-N} can be generated by the preference
31 engine 113 of the client terminal 100 and up-loaded to the video distribution system 102 or the

1 user profiles can be generated at the video distribution system 102 using the video distribution
2 system's preference engine 158. Moreover, the video distribution system 102 can also store
3 aggregated user profiles 164_{1-N}, as previously discussed, for the users of the client terminals.
4 User profiles, aggregated user profiles, and preference engines have been previously discussed.

5 A user may select a user profile rating source 163 from the list of rating sources 148.
6 Unlike a selectable critic rating source 160, which includes specific program rating data for
7 specific programs, the user profile 163 is an actual profile, that is generated by a preference
8 engine based upon the user's past viewing history, as previously discussed. Thus, the user profile
9 163 can be used to rank programs, based on the preferences of the user, without necessarily
10 having actual specific program rating data for the particular programs. If the rating source
11 selected is a user profile 163, the video distribution system controller 152 responsive to the
12 ranking program 116 applies the selected user profile to the program guide information to create
13 program rating data associated with the user profile. Next, the video distribution system
14 controller 152 responsive to the ranking program 116 ranks the program listings 107 by
15 comparing the program rating data associated with the selected user profile 163 to the currently
16 available program listings 107 to order the program listings 107 based upon the rating of each
17 program. The video distribution system controller 152 then commands the client terminal 100 to
18 display the ranked program listings 107 in the program guide 106 on the display device 104.
19 Alternatively, the video distribution system controller 152 can send a program guide 106 that is
20 ranked to the client terminal 100.

21 A user may select an aggregated user profile rating source 164 from the list of rating
22 sources 148. As previously described, the aggregated user profile 164 includes the aggregated
23 preferences of multiple users. Unlike a selectable critic rating source 160, which includes
24 specific program rating data for specific programs, the aggregated user profile 164 is an actual
25 profile, that is generated by a preference engine based upon an aggregation of various user's past
26 viewing histories (e.g. an aggregated user profile can be for a family having a client terminal,
27 each family member having an individual user profile), as previously discussed. Thus, the
28 aggregated user profile 164 can be used to rank programs, based on the aggregated preferences
29 of the users, without necessarily having actual specific program rating data for the particular
30 programs. If the rating source selected is aggregated user profile 164, the video distribution
31 system controller 152 responsive to the ranking program 116 applies the selected aggregated user

1 profile 164 to the program guide information to create program rating data associated with the
2 aggregated user profile 164. Next, the video distribution system controller 152 responsive to the
3 ranking program 116 ranks the program listings 107 by comparing the program rating data
4 associated with the selected aggregated user profile 164 to the currently available program
5 listings 107 to order the program listings 107 based upon the rating of each program. The video
6 distribution system controller 152 then commands the client terminal 100 to display the ranked
7 program listings 107 in the program guide 106 on the display device 104. Alternatively, the
8 video distribution system controller 152 can send a program guide 106 that is ranked to the client
9 terminal 100.

10 A user may select a critic profile rating source 166 from the list of rating sources 148.
11 For example, the list of rating sources 148 can include a plurality of critic profile rating sources
12 1-N 166_{1-N}. Unlike a selectable critic rating source 160, which includes specific program rating
13 data for specific programs, the critic profile rating sources 166_{1-N} are actual profiles (similar to
14 the user profile 163), that are generated by the preference engine 158 based upon a past history
15 of ratings by the critic rating source, such as past program rating data associated with the critic.
16 Thus, the critic profile 166 ranks programs, based on the preferences of the critic rating source,
17 without necessarily having actual specific program rating data for the particular programs. The
18 use of preference engines to create profiles has been previously discussed. Examples of critic
19 profiles 166_{1-N} can be the same as the critic rating sources 160_{1-N}, but can also include other critic
20 profiles. Accordingly, similar to the critic rating source, critic profiles can include such content
21 review sources such as movie critics (e.g. Ebert and Roeper, Leonard Maltin (Entertainment
22 Tonight), Gene Shallit (NBC's Today Show), etc.), a printed/electronic publication (e.g. TV
23 GUIDE), a service provider review (e.g. Cable and Satellite Network reviews of programs),
24 Newspaper reviews, etc.

25 Moreover, as previously discussed a user may select one of a plurality of virtual critic
26 profile rating sources 1-N 166_{1-N} from the list of rating sources 148. Unlike a selectable critic
27 rating source 160, which includes specific program rating data for specific programs, the virtual
28 critic profile rating sources are actual profiles (similar to the user profile 163), that are generated
29 by the preference engine 158 based upon a past history of ratings by a plurality of critic rating
30 sources, such as past program rating data associated with the plurality of critics. Particularly, the
31 preference engine 158 creates a virtual critic profile based upon program rating data associated

1 with a plurality of critic rating sources (e.g. critics associated with critic rating sources). The use
2 of preference engines to create profiles has been previously discussed. Thus, the virtual critic
3 profile 166 ranks programs, based on the preferences of the plurality of critic rating sources,
4 without necessarily having actual specific program rating data for the particular programs. In
5 one embodiment, the user can pick the critics they want to combine together to form their own
6 virtual critic profile. Alternatively, a plurality of virtual critic profiles can be presented for
7 selection by the user. Examples of virtual critic profiles 166_{1-N} can be combinations of two or
8 more of the critic rating sources 160_{1-N}, but can also include other critic profiles. It should be
9 appreciated that a wide variety of virtual critic profiles can be created. For example, a
10 combination of two or more of the following critic rating sources could be used to create a
11 virtual critic profile: movie critics (e.g. Ebert and Roeper, Leonard Maltin (Entertainment
12 Tonight), Gene Shallit (NBC's Today Show), etc.), a printed/electronic publication (e.g. TV
13 GUIDE), a service provider review (e.g. Cable and Satellite Network reviews of programs),
14 Newspaper reviews, etc.

15 In one embodiment, where the video distribution system 102 generates the critic profile
16 or the virtual critic profile using the preference engine 158, if the rating source selected is a critic
17 profile or a virtual critic profile 166_{1-N}, the video distribution system controller 152 responsive to
18 the ranking program 116 applies the selected critic or virtual critic profile 166 to the program
19 guide information to create program rating data associated with the selected critic or virtual critic
20 profile 166. Next, the video distribution system controller 152 responsive to the ranking
21 program 116 ranks the program listings 107 by comparing the program rating data associated
22 with the selected critic or virtual critic profile 166 to the currently available program listings 107
23 to order the program listings 107 based upon the rating of each program. The video distribution
24 system controller 152 then commands the client terminal 100 to display the ranked program
25 listings 107 in the program guide 106 on the display device 104. Alternatively, the video
26 distribution system controller 152 can send a program guide 106 that is ranked to the client
27 terminal 100.

28 FIG. 4 is a flow diagram according to one embodiment of the present invention. The
29 flow diagram 400 illustrates a method for presenting ranked program listings in a program guide
30 based upon a selected rating source. At step 402, a user is allowed to select a rating source from
31 a list of rating sources. Next, at step 404, the terminal controller 115 responsive to the ranking

1 program 116 ranks the program listings 107 based upon program rating data associated with the
2 selected rating source. At step 406, the terminal controller 115 responsive to the ranking
3 program 116 causes the ranked program listings to be displayed in a program guide 106 on a
4 display device 104.

5 FIG. 5 is a more detailed flow diagram according to one embodiment of the present
6 invention. The flow diagram 500 illustrates another embodiment of a method for presenting
7 ranked program listings in a program guide based upon a selected rating source. At step 502, a
8 user is allowed to select a rating source from a list of rating sources.

9 At step 504, the terminal controller 115 responsive to the ranking program 116
10 determines whether the selected rating source is a critic rating source. If so, at step 506 the
11 terminal controller 115 responsive to the ranking program 116 ranks the program listings 107
12 based upon the selected critic rating source. At step 508, the terminal controller 115 responsive
13 to the ranking program 116 causes the ranked program listings to be displayed in a program
14 guide 106 on a display device 104.

15 If the rating source selected is not a critic rating source, at step 510, the terminal
16 controller 115 responsive to the ranking program 116 determines whether the selected rating
17 source is an aggregated subscriber rating source. If so, at step 506 the terminal controller
18 responsive to the ranking program 116 ranks the program listings 107 based upon the selected
19 aggregated subscriber rating source. At step 508, the terminal controller 115 responsive to the
20 ranking program 116 causes the ranked program listings to be displayed in a program guide 106
21 on a display device 104.

22 Otherwise, if the rating source selected is not an aggregated subscriber rating source, at
23 step 512, the terminal controller 115 responsive to the ranking program 116 determines whether
24 the selected rating source is a user profile rating source. If so, at step 506 the terminal controller
25 responsive to the ranking program 116 ranks the program listings 107 based upon the
26 selected user profile rating source. At step 508, the terminal controller 115 responsive to the
27 ranking program 116 causes the ranked program listings to be displayed in a program guide 106
28 on a display device 104.

29 On the other hand, if the rating source selected is not a user profile rating source, at step
30 514, the terminal controller 115 responsive to the ranking program 116 determines whether the
31 selected rating source is an aggregated user profile rating source. If so, at step 506 the terminal

1 controller 115 responsive to the ranking program 116 ranks the program listings 107 based upon
2 the selected aggregated user profile rating source. At step 508, the terminal controller 115
3 responsive to the ranking program 116 causes the ranked program listings to be displayed in a
4 program guide 106 on a display device 104.

5 However, if the rating source selected is not an aggregated user profile rating source, at
6 step 516, the terminal controller 115 responsive to the ranking program 116 determines whether
7 the selected rating source is a critic profile rating source. If so, at step 506 the terminal controller
8 115 responsive to the ranking program 116 ranks the program listings 107 based upon the
9 selected critic profile rating source. At step 508, the terminal controller 115 responsive to the
10 ranking program 116 causes the ranked program listings to be displayed in a program guide 106
11 on a display device 104. If not, the flow diagram returns to step 502.

12 The embodiments of the present invention and their various functional components can
13 be implemented in hardware, software, firmware, middleware or a combination thereof and
14 utilized in systems, subsystems, components, or sub-components thereof. When implemented in
15 software, these embodiments are the instructions/code segments to perform the necessary tasks.
16 The program or code segments can be stored in a machine readable medium, such as a processor
17 readable medium or a computer program product, or transmitted by a computer data signal
18 embodied in a carrier wave, or a signal modulated by a carrier, over a transmission medium or
19 communication link. The machine-readable medium or processor-readable medium may include
20 any medium that can store or transfer information in a form readable and executable by a
21 machine (e.g. a terminal controller, a processor, a computer, etc.). Examples of the
22 machine/processor-readable medium include an electronic circuit, a semiconductor memory
23 device, a ROM, a flash memory, an erasable programmable ROM (EPROM), a floppy diskette,
24 CD-ROM, an optical disk, a hard disk, a fiber optic medium, a radio frequency (RF) link, etc.
25 The computer data signal may include any signal that can propagate over a transmission medium
26 such as electronic network channels, optical fibers, air, electromagnetic, RF links, etc. The code
27 segments may be downloaded via computer networks such as the Internet, Intranet, etc.